

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION BY CROCKER WIND FARM, LLC FOR A
PERMIT FOR A WIND ENERGY FACILITY AND A 345 KV TRANSMISSION LINE
IN CLARK COUNTY, SOUTH DAKOTA, FOR CROCKER WIND FARM

SD PUC DOCKET EL-17-____

PREFILED TESTIMONY OF ELIZABETH ENGELKING
ON BEHALF OF CROCKER WIND FARM, LLC

December 15, 2017

1 **I. INTRODUCTION AND QUALIFICATIONS**

2
3 **Q. Please state your name and business address.**

4 A. My name is Elizabeth Engelking. I am Vice President for Strategy and Policy at
5 Geronimo Energy, LLC ("Geronimo"), located at 7650 Edinborough Way, Suite 725,
6 Edina, Minnesota.

7
8 **Q. Please describe your background and your duties.**

9 A. I received my MBA in finance and economics from the Carlson School of
10 Management at the University of Minnesota in 1986. From 1988-98, I was employed
11 as a rate analyst with the Minnesota Public Utilities Commission, where I oversaw
12 the implementation of Integrated Resource Planning and advised on utility resource
13 planning, ratemaking, and industry restructuring issues. In 1998, I joined Great
14 River Energy, where I worked as a transmission analyst and later as Manager of
15 Resource Planning, where I directed the development, filing, and acceptance of two
16 Integrated Resource Plans in Minnesota. From 2004-11, I worked as Xcel Energy's
17 Director of Resource Planning and Bidding, where I was responsible for developing
18 Integrated Resource Plans and long-term generation planning and acquisition. In
19 2012, I joined Geronimo, and I currently serve as Vice President for Strategy and
20 Policy. My responsibilities include oversight over Geronimo's regulatory and
21 legislative matters, as well as evaluation of commercial markets for wind and solar
22 energy. My resume is attached as Exhibit 1.

23
24 **Q. What is the relationship between Crocker Wind Farm, LLC ("Crocker" or the**
25 **"Applicant") and Geronimo?**

26 A. The Applicant is a wholly-owned subsidiary of Geronimo. Geronimo is a leading full-
27 service North American renewable energy company based in Edina, Minnesota, with
28 satellite offices in southwest Minnesota, North Dakota, South Dakota, Illinois,
29 Colorado, New York, and Michigan. Geronimo provides renewable energy
30 development solutions for utilities and corporations looking to harness renewable
31 energy for business growth. Geronimo has developed several operating wind farms

1 and solar projects throughout the United States. Over 1,600 megawatts (“MW”) of
2 wind projects and solar projects developed by Geronimo are either operational or
3 currently under construction. Geronimo has a multi-gigawatt development pipeline
4 of wind and solar projects in various stages of development throughout the United
5 States.

6 7 **II. OVERVIEW**

8 9 **Q. What is the purpose of your Direct Testimony?**

10 A. The purpose of my testimony is to discuss the commercial demand for the Crocker
11 Wind Farm (“Project”). I will also discuss the impacts permitting delays would have
12 on the Project.

13 14 **Q. Please identify the portions of the Energy Facility Permit Application** 15 **(“Application”) that you are sponsoring for the record.**

16 A. I am sponsoring the following portions of the Application:

- 17 • Section 2.1: National and State Energy Demand
- 18 • Section 2.2: Renewable Power Demand by Utilities

19 20 **III. RENEWABLE ENERGY STANDARDS**

21 22 **Q. Does South Dakota have renewable energy standards?**

23 A. Yes. In 2008, South Dakota enacted legislation establishing an objective that 10
24 percent of all retail electric sales in the state be obtained from renewable and
25 recycled energy by 2015, with reporting required through 2017. See SDLC § 49-
26 34A-101. In 2009, the statute was amended to allow conserved energy as a
27 component, and it was reported in 2016 that a majority of the electric providers in
28 South Dakota met this goal. South Dakota has additional regulatory policies,
29 financial incentives, and technical resources aimed at encouraging energy efficiency
30 and the expanded use of renewable sources for electric generation, such as
31 property tax incentives and alternative taxation calculation.

1
2 **Q. Do other states in the region also have renewable energy standards?**

3 A. Yes. For example, Illinois requires certain utilities to obtain 25 percent of eligible
4 sales from renewables by 2025.¹ Similarly, North Dakota has adopted the national
5 “25 by 25” initiative, which establishes a goal of having not less than 25 percent of
6 total energy consumed within the United States come from renewable resources by
7 January 1, 2025.² Likewise, Minnesota utilities are required to provide 25 percent of
8 their total retail electric sales from eligible renewable resources by 2025.³ Although
9 15,147 MW of wind power capacity have been installed throughout the Mid-continent
10 Independent System Operator (“MISO”) footprint,⁴ the regional need for electricity,
11 and the potential to produce renewable resources from wind, far exceeds this
12 number.⁵

13
14 **IV. PROJECT DEMAND AND OFFTAKE**

15
16 **Q. What information did you evaluate concerning the demand for renewable**
17 **energy in the region?**

18 A. As an independent power producer (“IPP”), Crocker is not limited to the needs of
19 one region and is capable of selling to multiple wholesale consumers across the
20 region. Therefore, I evaluated the demand for wind energy in South Dakota and
21 surrounding states from both electric utilities and commercial, industrial, and
22 institutional (“C&I”) customers. For electric utilities, I reviewed the most recent
23 integrated resource plans of a number of utilities, which confirm that utilities are
24 seeking additional renewable generation resources in the next several years. For

¹ 20 Ill. Comp. Stat. sec. 3855/1-75(c)(1).

² See N.D. Cent. Code. § 17-01-01.

³ Minn. Stat. § 216B.1691.

⁴ See American Wind Energy Association, *Annual Report 2015*, at 98.

⁵ See *id.* at 65 (describing wind capacity in the upper Midwest); MISO, MISO Transmission Expansion Plan 2015, at 102 (explaining that certain proposed transmission projects will facilitate the interconnection of “41 million MWh of wind energy to meet renewable energy mandates and goals”), <https://www.misoenergy.org/Library/Repository/Study/MTEP/MTEP15/MTEP15%20Full%20Report.pdf>.

1 both electric utilities and C&I customers, I considered active requests for proposals
2 (“RFPs”) for wind energy. Over the past year, Geronimo has received eight utility
3 and eight C&I power supply proposal requests for which the Project would qualify,
4 indicating a demand for the output that will be produced by the Project. Additionally,
5 I have considered general market information on commercial demand for renewable
6 energy.

7
8 **Q. Why did you consider a broader region for evaluating demand for the Project?**

9 A. As an IPP, Crocker is not confined to a single set of customers or a defined service
10 territory. Further, the advent of Regional Transmission Operators (“RTOs”) has
11 increased the area over which energy can be economically traded. Crocker is
12 uniquely situated in the vicinity of major transmission lines for both the MISO and the
13 Southwest Power Pool (“SPP”), allowing us to market the Project across a broad
14 region, stretching from South Dakota to Indiana and down to Texas. In addition,
15 because many corporate contracts are settled financially instead of physically,
16 corporate customers for the Project could be located anywhere in the United States.
17 In a financial settlement, a customer does not take physical delivery of the electricity.
18 Instead, the energy is sold into the regional market and the customer receives a
19 financial settlement that reflect the difference between what they paid and what the
20 power sold for in the market.

21
22 **Q. Is there a demand for renewable energy, such as that which will be produced**
23 **by the Project, in the region?**

24 A. Yes. Utility long-range demand in the Midwest shows the intent to purchase
25 approximately 1,000 MW of wind energy over the next five years. This increased
26 demand is evident through the utilities’ integrated resource plans, as described in
27 Section 2.2 of the Application. In addition, as the cost of renewable energy has
28 decreased, C&I demand for renewable energy has increased, creating a new market
29 to obtain a power purchaser. For example, in 2016, approximately 1,600 MW of

1 wind energy was purchased by the C&I sector.⁶ Further, in a recent survey of more
2 than 150 commercial customers with annual revenues greater than \$250 million, 84
3 percent of respondents indicated that they planned to actively pursue or consider
4 directly buying renewable energy.⁷ Thus, the Project will help meet the regional
5 and/or C&I need for renewable energy produced in South Dakota.

6
7 **Q. Does the Project currently have an offtake agreement?**

8 A. Not at this time. Crocker is actively marketing the sale of electricity to third parties,
9 both utilities and large power consumers/marketers. Crocker is currently in active
10 discussions with three potential offtakers, but has not yet executed an offtake
11 agreement. The Project may sell power in the form of a power purchase
12 agreement, or the Project could be owned directly by a utility. Crocker expects to
13 have contracts for project offtake in place by the end of the first quarter of 2018.

14
15 **Q. Does the Applicant commit to providing the South Dakota Public Utilities**
16 **Commission (“Commission”) with updates concerning the Project’s offtake**
17 **agreements during this permitting process?**

18 A. Yes. Crocker will update the Commission on the status of offtake by April 1, 2018.

19
20 **Q. Where will the power produced by the Project be used?**

21 A. Electricity generation by the Project will enter the transmission grid in South Dakota
22 and will follow the path of least resistance in terms of where it is used. Even if the
23 power is purchased by an out-of-state buyer, the actual electricity produced will
24 remain near the Project and will meet general energy needs in South Dakota and the
25 surrounding region.

26

⁶ Renewable Choice Energy. “The Rise of the Corporate Energy Buyer.” View August 29, 2017.
<https://www.renewablechoise.com/blog-corporate-energy-buyer/>.

⁷ APEX Clean Energy and Green Biz. “2017 State of Corporate Energy Renewable Procurement”
September 2017

1 **Q. Should the Commission be concerned about the economic impacts of this**
2 **facility on South Dakota ratepayers?**

3 A. No, not at this time. Crocker is an IPP that does not serve retail customers in South
4 Dakota. As an IPP, Crocker is entirely at risk for the cost of the facility. To the
5 extent Crocker contracts with a public utility that serves retail customers in South
6 Dakota, the Commission has regulatory oversight over those contracts and would
7 consider impacts to ratepayers at that time.

8
9 **V. OTHER ISSUES**

10
11 **Q. Why does the Application present multiple turbine models?**

12 A. Crocker has not yet contracted for turbines for this project. Turbine supply
13 agreements reflect a large capital investment in the project, and are frequently
14 entered into after most major permits are received. Specifying a single turbine
15 option at this time would make it difficult for Crocker to negotiate the best price for
16 wind turbines. Negotiating turbine supply agreements in a competitive process with
17 a number of suppliers will reduce the overall cost of the Project and benefit the
18 Project offtakers.

19
20 **Q. Why is the Applicant pursuing a permit from the Commission by June 2018?**

21 A. The Federal Production Tax Credits ("PTC") for wind energy are currently in a five-
22 year phasedown starting at 100% of the credits if a project qualified by the end of
23 2016. Once qualified, a project must be constructed within four years to receive the
24 tax credits without demonstrating continuous construction. The Project was qualified
25 for the Federal PTC at the end of 2015, and thus needs to be operating by the end
26 of 2019 to receive credits. Because long lead time items such as interconnection
27 substation construction and equipment orders can take as many as 18 months, it is
28 important for Crocker to receive the requested permits by June 1, 2018.

29
30 **Q. Are there other consequences of Project delay?**

1 A. Yes. If the Project is not constructed or is delayed, potential power purchasers'
2 efforts to obtain renewable energy in a cost-effective and reliable manner would be
3 in jeopardy. Additionally, Project costs are subject to commodity flux and rise.
4 Therefore, if the Project is delayed, the greater the probability of a commodity price
5 increase.

6
7 **VI. CONCLUSION**

8
9 **Q. Does this conclude your Direct Testimony?**

10 A. Yes.

11
12 Dated this 15th day of December, 2017

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15 _____
16 Elizabeth Engelking